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EXAMINER

NEURAUTER, GEORGE C

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,372

Applicant(s)

BERG, MITCHELL T.

Examiner

George C. Neurauter, Jr.

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,10-12,16-22,25-27 and 31-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,10-12,16-22,25-27 and 31-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>21006,90205,12706</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2143

DETAILED ACTION

Claims 1-7, 10-12, 16-22, 25-27, and 31-59 are currently presented and have been examined.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 January 2006 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1-7, 10-12, 16-22, 25-27, and 31-59 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the

Art Unit: 2143

art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7, 10-12, 16-22, 25-27 and 31-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of US Patent 6 427 171 to Craft et al.

Regarding claim 1, Applicant's admitted prior art discloses an information processing system, comprising:

a first computing device (referred to in the specification as a "server"; page 8, lines 15-23 and Figure 1a of the specification) configured to:

receive an initialization packet originating from a client; (page 8, lines 1-7, specifically "a server...waits for a client to establish a connection with the server through a specified IP address and TCP port..."; page 8, lines 8-14, specifically

Art Unit: 2143

"After accepting a connection from a requesting client...";
paragraph 0054, specifically "The client and server communicate with one another through IP packets sent through the IP network")

store a data structure ("connection endpoint") associated with a connection to the client; (page 8, lines 8-14, specifically "the server...allocates (or "establishes" or "forms") a data structure (of the connection with the client) to store client-to-server protocol specific connection information.")

Applicant's admitted prior art does not expressly disclose wherein the first computing device selects a computing device to service the client, when the first computing device is selected to service the client, bind the data structure associated with a connection to the client to an application of the first computing device, and when the first computing device is not selected to service the client, migrate the data structure associated with the connection.

Craft discloses wherein the first computing device selects a computing device to service the client, when the first computing device is selected to service the client, bind the data structure associated with a connection (referred to within the reference as a "communication control block") to the client

Art Unit: 2143

to an application of the first computing device, and when the first computing device is not selected to service the client, migrate the data structure associated with the connection (column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since Craft discloses that migration of the data structure associated with the connection allows offloading of the TCP/IP data processing from the host computer to the first computing device (column 4, line 62-column 5, line 15). In view of these specific advantages and that the references are directed to establishing and maintaining client to server connections, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings.

Regarding claim 2, Applicant's admitted prior art and Craft disclose the system of claim 1.

Applicant's admitted prior art discloses wherein the data structure includes a group of sequence numbers associated with the connection. (page 8, lines 15-23, specifically "the

Art Unit: 2143

connection endpoint information includes a group of send and receive sequence numbers..."

Craft also discloses these limitations (column 5, lines 34-42, specifically line 35)

Regarding claim 3, Applicant's admitted prior art and Craft disclose wherein the system of claim 1.

Applicant's admitted prior art discloses wherein the data structure includes an IP address of the client, a port of an application executed by the client, an IP address of the first computing device, and a port of the application executed by the first computing device. (page 8, lines 15-23, specifically "...the connection endpoint information includes the client's and server's respective 32-bit IP addresses, the client application's and server application's respective 16 bit TCP connection ports..."

Craft also discloses these limitations (column 5, lines 34-42, specifically lines 36-38)

Regarding claim 4, Applicant's admitted prior art discloses an information processing system, comprising:

a first computing device (referred to in the specification as a "server"; page 8, lines 15-23 and Figure 1a of the specification) configured to:

Art Unit: 2143

receive a request packet originating from a client (page 8, lines 24-31, specifically "After establishing a successful connection, the client and server are operable to send (and receive) information to (and from) one another through the associated socket connection."; page 9, lines 1-8, specifically "With read and write calls to the socket layer, the client and server are operable to send and receive information at the application level. The client and server communicate with one another through IP packets sent through the IP network").

Applicant's admitted prior art does not disclose when the packet is associated with a connection that corresponds to an application of the first computing device, forward the packet and a reference to an associated connection endpoint to a network protocol stack that is external to an operating system of the first computing device.

Craft discloses when the packet is associated with a connection that corresponds to an application of the first computing device, forward the packet and a reference to an associated connection endpoint to a network protocol stack that is external to an operating system of the first computing device. (column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33).

Art Unit: 2143

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since Craft discloses that forwarding packets and a reference to an associated connection point allows offloading of the TCP/IP data processing from the host computer to the first computing device (column 4, line 62-column 5, line 15). In view of these specific advantages and that the references are directed to establishing and maintaining client to server connections, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings.

Regarding claim 5, Applicant's admitted prior art and Craft disclose the system of claim 4.

Applicant's admitted prior art discloses wherein the reference indicates a group of sequence numbers associated with the connection. (page 8, lines 15-23, specifically "the connection endpoint information includes a group of send and receive sequence numbers...")

Craft also discloses these limitations (column 5, lines 34-42, specifically line 35)

Art Unit: 2143

Regarding claim 6, Applicant's admitted prior art and Craft disclose the system of claim 4.

Applicant's admitted prior art discloses wherein the reference indicates an IP address of the client, a port of an application executed by the client, an IP address of the first computing device, and a port of the application executed by the first computing device. (page 8, lines 15-23, specifically "...the connection endpoint information includes the client's and server's respective 32-bit IP addresses, the client application's and server application's respective 16 bit TCP connection ports...")

Craft also discloses these limitations (column 5, lines 34-42, specifically lines 36-38)

Regarding claim 7, Applicant's admitted prior art and Craft disclose the information processing system of claim 1.

Applicant's admitted prior art discloses wherein in response to at least the initialization packet the first computing device is configured to generate an acknowledgement to the client (page 8, lines 24-31).

Regarding claim 10, Applicant's admitted prior art discloses an information processing system, comprising:

Art Unit: 2143

a first computing device (referred to in the specification as a "server"; page 8, lines 15-23 and Figure 1a of the specification) configured to:

associate an application of the first computing device with a data structure associated with a connection to a client (page 8, lines 8-14, specifically "...the server...allocates...a data structure (of the connection of the client) to store client-to-server protocol specific connection information."; page 8, lines 15-23, specifically "...the connection endpoint information includes...the client application's and server application's respective 16-bit TCP connection ports...").

Applicant's admitted prior art does not disclose selectively disassociating the application of the first computing device from the data structure and outputting a reference to the data structure associated with the connection.

Craft discloses selectively disassociating the application of the first computing device from the data structure and outputting a reference to the data structure associated with the connection (column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since Craft discloses that disassociating an

Art Unit: 2143

application from the data structure and outputting a reference to a data structure allows dynamic transfer control of a TCP connection in the case of dropped packets and other exceptions (column 5, lines 15-28). In view of these specific advantages and that the references are directed to establishing and maintaining client to server connections, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings.

Regarding claim 11, Applicant's admitted prior art and Craft disclose the system of claim 10.

Applicant's admitted prior art discloses wherein the data structure includes a group of sequence numbers associated with the connection. (page 8, lines 15-23, specifically "the connection endpoint information includes a group of send and receive sequence numbers...")

Craft also discloses these limitations (column 5, lines 34-42, specifically line 35)

Regarding claim 12, Applicant's admitted prior art and Craft disclose the system of claim 10.

Art Unit: 2143

Applicant's admitted prior art discloses wherein the data structure includes an IP address of the client, a port of an application executed by the client, an IP address of the first computing device, and a port of the application executed by the first computing device. (page 8, lines 15-23, specifically "...the connection endpoint information includes the client's and server's respective 32-bit IP addresses, the client application's and server application's respective 16 bit TCP connection ports...")

Craft also discloses these limitations (column 5, lines 34-42, specifically lines 36-38)

Claims 16-27 are also rejected since claims 16-27 recite a method that contain substantially the same limitations as recited in claims 1-7 and 10-12 respectively.

Regarding claim 31, Applicant's admitted prior art and Craft disclose the system of claim 1.

Applicant's admitted prior art discloses wherein the data structure comprises a connection endpoint. (page 8, lines 8-14, specifically "...the server...allocates...a data structure (of the connection of the client) to store client-to-server protocol specific connection information. This data structure is referred to as...(or "connection endpoint").)

Art Unit: 2143

Regarding claim 32, Applicant's admitted prior art and Craft disclose the system of claim 1.

Applicant's admitted prior art does not disclose wherein the first computing device is configured to migrate the data structure by storing a reference to a second computing device; and associating the stored reference with the data structure.

Craft discloses wherein the first computing device is configured to migrate the data structure by storing a reference to a second computing device; and associating the stored reference with the data structure. (column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33)

Claim 32 is rejected since the motivations regarding the obviousness of claim 1 also apply to claim 32.

Regarding claim 33, Applicant's admitted prior art and Craft disclose the system of claim 1.

Applicant's admitted prior art does not disclose wherein the first computing device is configured to select the computing device to service the client based at least in part on a state of the first computing device.

Craft discloses wherein the first computing device is configured to select the computing device to service the client based at least in part on a state of the first computing device. (column 4, line 62-column 5, line 15)

Art Unit: 2143

Claim 33 is rejected since the motivations regarding the obviousness of claim 1 also apply to claim 33.

Regarding claim 34, Applicant's admitted prior art and Craft disclose the system of claim 4.

Applicant's admitted prior art discloses wherein the application of the first computing device is a socket-based application. (page 8, lines 1-7, specifically "In FIG. 1a, a server makes its socket application (or "socket-based application") available through the IP network and waits for a client to establish a connection with the server through a specified IP address and TCP port (e.g. through a listening socket).")

Regarding claim 35, Applicant's admitted prior art and Craft disclose the system of claim 4.

Applicant's admitted prior art does not disclose wherein the first computing device is further configured to, when the packet is not associated with a connection that corresponds to an application of the first computing device, selectively encapsulate the packet and forward the encapsulated packet.

Craft discloses wherein the first computing device is further configured to, when the packet is not associated with a connection that corresponds to an application of the first

Art Unit: 2143

computing device, selectively encapsulate the packet and forward the encapsulated packet. (column 4, lines 25-46)

Claim 35 is rejected since the motivations regarding the obviousness of claim 4 also apply to claim 35.

Regarding claim 36, Applicant's admitted prior art and Craft disclose the system of claim 35.

Applicant's admitted prior art does not disclose wherein the encapsulated packet includes a reference to the associated connection endpoint.

Craft discloses wherein the encapsulated packet includes a reference to the associated connection endpoint. (column 4, lines 25-46; column 5, lines 43-58)

Claim 36 is rejected since the motivations regarding the obviousness of claim 4 also apply to claim 36.

Regarding claim 37, Applicant's admitted prior art and Craft disclose the system of claim 10.

Applicant's admitted prior art does not disclose wherein the reference is output to a second computing device for associating an application of the second computing device with the data structure of the connection.

Craft discloses wherein the reference is output to a second computing device for associating an application of the second computing device with the data structure of the connection.

Art Unit: 2143

(column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33)

Claim 37 is rejected since the motivations regarding the obviousness of claim 10 also apply to claim 37.

Regarding claim 38, Applicant's admitted prior art and Craft disclose the system of claim 37.

Applicant's admitted prior art does not disclose wherein the application of the first computing device is of a first type and the application of the second computing device is of a second type.

Craft discloses wherein the application of the first computing device is of a first type and the application of the second computing device is of a second type. (column 4, line 62-column 5, line 15)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since Craft discloses that use of different type of applications in different computing devices allows for specific offloading of processing overhead (column 4, line 62-column 5, line 15). In view of these specific advantages and that the references are directed to establishing and maintaining client to server connections, one of ordinary skill would have been motivated to combine these references and would have

Art Unit: 2143

considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings.

Regarding claim 39, Applicant's admitted prior art and Craft disclose the system of claim 37.

Applicant's admitted prior art does not disclose wherein the first computing device is configured to selectively disassociate the application of the first computing device from the data structure based at least in part on a state of at least one of the first computing device or the second computing device.

Craft discloses wherein the first computing device is configured to selectively disassociate the application of the first computing device from the data structure based at least in part on a state of at least one of the first computing device or the second computing device. (column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33)

Claim 39 is rejected since the motivations regarding the obviousness of claim 39 also apply to claim 10.

Claims 40-48 are also rejected since claims 40-48 recite a method that contain substantially the same limitations as recited in claims 31-38 respectively.

Art Unit: 2143

Regarding claim 49, Applicant's admitted prior art discloses a computer-readable memory medium containing instructions for controlling a processor of a first server (referred to in the specification as a "server"; page 8, lines 15-23 and Figure 1a of the specification) to selectively load balance and direct network requests among a plurality of servers by receiving a request packet originating from a client (page 8, lines 24-31, specifically "After establishing a successful connection, the client and server are operable to send (and receive) information to (and from) one another through the associated socket connection."; page 9, lines 1-8, specifically "With read and write calls to the socket layer, the client and server are operable to send and receive information at the application level. The client and server communicate with one another through IP packets sent through the IP network").

Applicant's admitted prior art does not disclose selectively, when the packet is associated with a connection endpoint bound to a socket of an application of the first server, forwarding the packet and a reference to the associated connection endpoint to a protocol stack of the first server; and when the packet is associated with a connection endpoint bound to a socket of an application of a second server, encapsulating the packet and forwarding the encapsulated packet to a second

Art Unit: 2143

server, the encapsulated packet including a reference to the associated connection endpoint bound to the socket of the application of the second server.

Craft discloses selectively, when the packet is associated with a connection endpoint bound to a socket of an application of a server, forwarding the packet and a reference to the associated connection endpoint to a protocol stack of the server; and when the packet is associated with a connection endpoint bound to a socket of an application of a server, encapsulating the packet and forwarding the encapsulated packet to the server, the encapsulated packet including a reference to the associated connection endpoint bound to the socket of the application of the server (column 3, lines 3-13; column 4, lines 25-46 and 47-61; column 5, lines 15-33).

Claim 49 is rejected since the motivations regarding the obviousness of claim 4 also apply to claim 49.

Regarding claim 50, Applicant's admitted prior art and Craft disclose the computer-readable memory medium of claim 49.

Applicant's admitted prior art discloses the medium further comprising instructions that control the processor of the first server by including in the reference that is forwarded to the protocol stack an indication of a group of sequence numbers associated with the connection. (page 8, lines 15-23,

Art Unit: 2143

specifically "the connection endpoint information includes a group of send and receive sequence numbers...")

Craft also discloses these limitations (column 5, lines 34-42, specifically line 35)

Regarding claim 51, Applicant's admitted prior art and Craft disclose the computer-readable memory medium of claim 49.

Applicant's admitted prior art discloses the medium further comprising instructions that control the processor of the first server by: including an indication within an encapsulated packet of a group of sequence numbers associated with the connection. (page 8, lines 15-23, specifically "the connection endpoint information includes a group of send and receive sequence numbers...")

Craft also discloses these limitations (column 5, lines 34-42, specifically line 35)

Regarding claim 52, Applicant's admitted prior art and Craft disclose the computer-readable memory medium of claim 49.

Applicant's admitted prior art discloses the medium further comprising instructions that control the processor of the first server by including in the reference that is forwarded to the protocol stack an indication of an IP address of the client, a port of an application executed by the client, an IP address of the first server, and a port of an application executed by the

Art Unit: 2143

first server. (page 8, lines 15-23, specifically "...the connection endpoint information includes the client's and server's respective 32-bit IP addresses, the client application's and server application's respective 16 bit TCP connection ports...")

Craft also discloses these limitations (column 5, lines 34-42, specifically lines 36-38)

Regarding claim 53, Applicant's admitted prior art discloses a computer-readable memory medium containing instructions for controlling a processor of a first server (referred to in the specification as a "server"; page 8, lines 15-23 and Figure 1a of the specification) to selectively load balance and direct network requests among a plurality of servers by:

associating an application of the first server to a data structure associated with a connection with a client; (page 8, lines 8-14, specifically "...the server...allocates...a data structure (of the connection of the client) to store client-to-server protocol specific connection information."; page 8, lines 15-23, specifically "...the connection endpoint information includes...the client application's and server application's respective 16-bit TCP connection ports...")

Art Unit: 2143

Applicant's admitted prior art does not disclose disassociating the application of the first server from the data structure associated with the connection and outputting a reference to the data structure associated with the connection to a second server for associating an application of the second server to the data structure associated with the connection.

Craft discloses disassociating the application of the first server from the data structure associated with the connection and outputting a reference to the data structure associated with the connection to a second server for associating an application of the second server to the data structure associated with the connection (column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33).

Claim 53 is rejected since the motivations regarding the obviousness of claim 10 also apply to claim 53.

Regarding claim 54, Applicant's admitted prior art and Craft discloses the computer-readable memory medium of claim 53.

Applicant's admitted prior art discloses the medium further comprising instructions that control the processor of the first server by including in the data structure a group of sequence numbers associated with the connection. (page 8, lines 15-23, specifically "the connection endpoint information includes a group of send and receive sequence numbers...")

Art Unit: 2143

Craft also discloses these limitations (column 5, lines 34-42, specifically line 35)

Regarding claim 55, Applicant's admitted prior art and Craft disclose the computer-readable memory medium of claim 53.

Applicant's admitted prior art discloses the medium further comprising instructions that control the processor of the first server by including in the outputted reference an indication of a group of sequence numbers associated with the connection. (page 8, lines 15-23, specifically "the connection endpoint information includes a group of send and receive sequence numbers...")

Craft also discloses these limitations (column 5, lines 34-42, specifically line 35)

Regarding claim 56, Applicant's admitted prior art and Craft disclose the computer-readable memory medium of claim 53.

Applicant further comprising instructions that control the processor of the first server by including in the outputted reference an indication of an IP address of the client, a port of an application executed by the client, an IP address of the second server, and a port of an application executed by the second server. (page 8, lines 15-23, specifically "...the connection endpoint information includes the client's and server's respective 32-bit IP addresses, the client

Art Unit: 2143

application's and server application's respective 16 bit TCP connection ports...")

Craft also discloses these limitations (column 5, lines 34-42, specifically lines 36-38)

Regarding claim 57, Applicant's admitted prior art and Craft disclose the computer-readable memory medium of claim 53.

Applicant's admitted prior art does not disclose the medium further comprising instructions that control the processor of the first server by re-associating the application of the first server to the data structure associated with the connection with the client.

Craft discloses the medium further comprising instructions that control the processor of the first server by re-associating the application of the first server to the data structure associated with the connection with the client. (column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of these references since Craft discloses that re-associating the application of the first server to the data structure associated with the connection with the client allows dynamic transfer control of a TCP connection in the case of dropped packets and other exceptions (column 5, lines 15-28). In view of

Art Unit: 2143

these specific advantages and that the references are directed to establishing and maintaining client to server connections, one of ordinary skill would have been motivated to combine these references and would have considered them to be analogous to one another based on their related fields of endeavor, which would lead one of ordinary skill to reasonably expect a successful combination of the teachings.

Regarding claim 58, Applicant's admitted prior art discloses a first server, comprising:

a memory configured to store a data structure associated with a connection to a client originating an initialization packet (page 8, lines 1-7, specifically "a server...waits for a client to establish a connection with the server through a specified IP address and TCP port..."; page 8, lines 8-14, specifically "After accepting a connection from a requesting client..."; paragraph 0054, specifically "The client and server communicate with one another through IP packets sent through the IP network"); (page 8, lines 8-14, specifically "the server...allocates (or "establishes" or "forms") a data structure (of the connection with the client) to store client-to-server protocol specific connection information."); and a network protocol stack external to an operating system of the first server (page 9, lines 9-10).

Art Unit: 2143

Applicant's admitted prior art does not disclose a module configured to selectively bind the data structure associated with the connection to the client to an application of the first server.

Craft discloses a module configured to selectively bind the data structure associated with the connection to the client to an application of the first server. (column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33)

Claim 58 is rejected since the motivations regarding the obviousness of claim 1 also apply to claim 58.

Regarding claim 59, Applicant's admitted prior art and Craft disclose the server of claim 58.

Applicant's admitted prior art does not disclose wherein, when the first server is not selected to service the client, the first server is configured to migrate the data structure associated with the connection.

Craft discloses wherein, when the first server is not selected to service the client, the first server is configured to migrate the data structure associated with the connection. (column 3, lines 3-13; column 4, lines 47-61; column 5, lines 15-33)

Claim 59 is rejected since the motivations regarding the obviousness of claim 1 also apply to claim 59.

Art Unit: 2143

Conclusion

It is noted that the column, line, and/or page number citations used in the prior art references as applied by the Examiner to the claimed invention are for the convenience of the Applicant to represent the relevant teachings of the prior art. The prior art references may contain further teachings and/or suggestions that may further distinguish the citations applied to the claims, therefore, the Applicant should consider the entirety of these prior art references during the process of responding to this Office Action. It is further noted that any alternative and nonpreferred embodiments as taught and/or suggested within the prior art references also constitute prior art and the prior art references may be relied upon for all the teachings would have reasonably suggested to one of ordinary skill in the art. See MPEP 2123.

The prior art listed in the PTO-892 form included with this Office Action disclose methods, systems, and apparatus similar to those claimed and recited in the specification. The Examiner has cited these references to evidence the level and/or knowledge of one of ordinary skill in the art at the time the invention was made, to provide support for universal facts and the technical reasoning for the rejections made in this Office Action including the Examiner's broadest reasonable

Art Unit: 2143

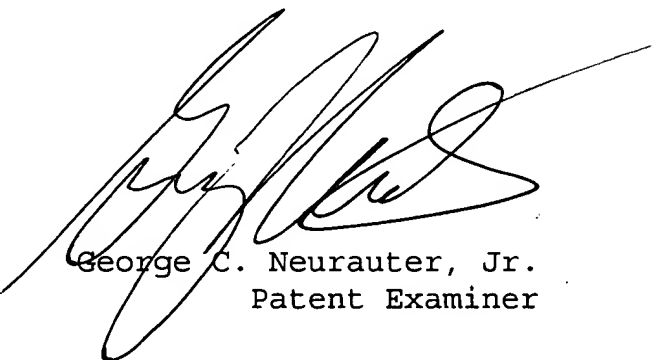
interpretation of the claims as required by MPEP 2111 and to evidence the plain meaning of any terms not defined in the specification that are interpreted by the Examiner in accordance with MPEP 2111.01. The Applicant should consider these cited references when preparing a response to this Office Action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Neurauter, Jr. whose telephone number is (571) 272-3918. The examiner can normally be reached on Monday through Friday from 9AM to 5:30PM Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2143

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George C. Neurauter, Jr.
Patent Examiner